DRISI

Caltrans Division of Research, Innovation and System Information

Research Results

Transportation Security and Emergency Preparedness

Providing guidance to transportation planners in incorporating security and emergency management as part of the development process

Maintenance

JANUARY 2014

Project Title:
Transportation Security and Emergency Preparedness Professional Capacity Building (PCB) TPF-5(161)

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Training

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WHAT WAS THE NEED?

In the years since 9/11, measures have been taken to minimize the possibility and mitigate potential consequences of a terrorist attack. States have been conducting risk and threat assessments to determine which prevention, protection, and preparedness measures might be required to protect structures, including those that are integral to the transportation system, such as bridges, tunnels, highways, rail, and aviation facilities. The information that has been accumulated regarding emergency management and security considerations needs to be incorporated into the project development process in the early stages of planning infrastructure projects. Transportation project planners also need tools to assist in evaluating security issues when planning projects.

WHAT WAS OUR GOAL?

The goal was to introduce transportation project planners to the idea of and need for involving various agencies, organizations, and people in developing security and emergency management requirements during the early stages and throughout the project development and planning processes.

Caltrans provides solutions and knowledge that improve California's transportation system.

WHAT DID WE DO?

Caltrans, in partnership with other member states that were part of the Federal Highway Administration Transportation Pooled Fund Study, developed the guide, *Considering Security and Emergency Management in the Planning of Transportation Projects*. The guide will increase the awareness in the transportation infrastructure project community, especially those individuals working for state departments of transportation (DOT) or regional metropolitan planning organizations (MPO), about the need for security and emergency management. The intended primary audience is planners of new projects responsible for developing highway-related infrastructure projects.

WHAT WAS THE OUTCOME?

The guide provides the following information:

- Rationale for the consideration of security and emergency management measures when planning transportation infrastructure projects
- Identification of potential project partners
- Examples of measures to be taken during planning
- When to incorporate the measures into the planning process
- Checklist for project planners to guide them through the initial phase of getting partners on board
- References related to security and emergency management, including papers, reports, and websites

In addition, the following training resources in the areas of highway infrastructure security and emergency management were developed.

- Training system for management, defining organization roles and missions
  www.fhwa.dot.gov/security/emergencymgmt/profcapacitybldg/docs/hsemexecsrrleaders/hsem_srexecs.cfm
- Web-based training system on evacuation principles
  www.nhi.fhwa.dot.gov/training/course_search.aspx?tab=0&key=133107133107&course_no=133107&res=1
- National Incident Management System website to train frontline transportation personnel on incidents
  www.fhwa.dot.gov/security/emergencymgmt/profcapacitybldg/index.cfm
- CD developed for DOTs to introduce component-level risk management into the project management development process
- Document on security and emergency management considerations for highway planners to modify the *Highway Design Manual* and other planning manuals
  http://planning.dot.gov/documents/ConsideringSecurityAndEM.pdf

WHAT IS THE BENEFIT?

Incorporating security and emergency management considerations into the planning process increases transportation safety in general, not only in the realm of preventing and protecting against intentional manmade incidents. The steps taken to reduce the impact of these incidents on the transportation infrastructure might also mitigate the effects of a natural disaster or collisions involving hazardous materials. Implementing security and emergency measures when designing new construction projects is typically less expensive and more cost effective than retrofitting a structure later.

LEARN MORE

For information about the pooled fund study:
www.pooledfund.org/Details/Study/385